

## REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow are respectfully requested.

Claims 1-32 are pending in the application, claim 32 having been added above. Claim 32 points out further aspects of the invention, support for which can be found at least in sections [0145], [0190] and [0260] of the specification.

By the foregoing amendments, a typographical error in claim 12 has been corrected. In addition, the preamble of claims 21-24 and 26-31 has been corrected, consistent with independent claim 20.

Turning now to the Official Action, claims 1-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sakaino et al (U.S. Patent No. 5,909,523) in view of Shaw et al (U.S. Patent No. 6,456,766). This rejection is respectfully traversed for at least the following reasons.

The present invention relates to optical submounts and to optical devices. Independent claim 1, for example, sets forth an optical submount comprising: a) a substrate; b) a trench in the substrate for holding an optoelectronic device on-edge; c) an electrical connection pit adjoining the trench; and d) a metallization layer in the electrical connection pit. Independent claim 20 sets forth an optical device, comprising: a) a substrate; b) a trench in the substrate; c) an electrical connection pit adjoining the trench; d) a metallization layer in the electrical connection pit; and e) an optoelectronic device disposed on-edge in the trench, wherein the optoelectronic device has a contact pad soldered to the metallization layer.

The present claims cannot properly be rejected based on the combined teachings of Sakaino et al and Shaw et al.

Sakaino et al relates to an optical module in which an optical fiber or an optical waveguide is optically coupled with an optical semiconductor device, employed in an optical transmitter or receiver (col. 1, lines 5-8). The Examiner relies on Figure 15 of Sakaino for its purported disclosure of various claim features.

As correctly noted in the Official Action, Sakaino et al does not disclose an electrical connection pit adjoining a trench, or a metallization layer in the electrical

connection pit. To cure this deficiency in the primary reference, the Official Action relies on Figures 25 and 104 of Shaw et al. However, Shaw et al fails to cure this deficiency in Sakaino et al. Shaw et al, like Sakaino et al, does not disclose or suggest an electrical connection pit adjoining a trench, or a metallization layer in the electrical connection pit. It is not clear to applicants what features of the Shaw et al drawings the Examiner is relying upon, as there is no such indication in the Official Action. Applicants note, nevertheless, that reference numeral 424 in Figure 25 is a plurality of wire connector pads 424 “on surface 422” (emphasis added) (col. 16, lines 61-62). Figure 104 appears to show a similar structure. Such structures are not suggestive of an electrical connection pit and a metallization layer in the electrical connection pit.

Accordingly, even if one would have combined the documents in the manner suggested in the Official Action, the present invention would not result. Simply put, no *prima facie* case of obviousness has been established.

Accordingly, withdrawal of the §103(a) rejection based on Sakaino et al and Shaw et al is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at her earliest convenience.

Respectfully submitted,



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